

RECORD OF DECISION

May 23, 2000 Multiple-Program JRC

The Joint Resources Council (JRC) was convened to consider decisions for a number of programs. The meeting was chaired by Steven Zaidman, FAA Acquisition Executive, Associate Administrator for Research and Acquisitions, ARA-1. The following additional JRC members were present: Alan Moore and Jim Hevelone for Associate Administrator for Air Traffic Services, ATS-1; Bob Wright for Associate Administrator for Regulation and Certification, AVR-1; Anthony Washington for Chief Counsel, AGC-1; D. J. Stadtler for Associate Administrator for Commercial Space Transportation, AST-1; Jim White for Associate Administrator for Airports, ARP-1; Dan Mehan, Chief Information Officer, AIO-1; Chuck Hedges for Assistant Administrator for System Safety, ASY-1; Quentin Johnson for Associate Administrator for Security, ACS-1; Lorraine Berry for Assistant Administrator for Region and Center Operations, ARC-1; and John Hennigan for Chief Financial Officer, ABA-1. The decisions requested were: approval of the investment decisions and Acquisition Program Baselines (APB) for NAS Infrastructure Management System (NIMS) Phase 2, Airport Cable Loop, and Power Systems Sustained Support; approval of the Next Generation Air/Ground Communication System (NEXCOM) acquisition strategy and APB change; approval of the Facility Security Risk Management (FSRM) program cost and schedule baseline changes and subsequent APB approval; and approval of the Next Generation Messaging mission need.

Discussion

Multiple programs were briefed. The briefers were: Greg Street, ASD-300, on the status of the FY-02 F&E Budget; Richard Simmons, AOP-10, and Ken Chin, ASD-400, on NAS Infrastructure Management System (NIMS) Phase 2; Mike Shveda, AND-360, on Next Generation Air/Ground Communication System (NEXCOM); Chris Fay, ANS-400, on Facility Security Risk Management (FSRM); Kristen Burnham, ASD-400, on Power Systems Sustained Support; Drew Denton, ANS-600, on Airport Cable Loop Systems Sustained Support; Richard Boe, ASU-500, on Next Generation Messaging; and Kimberly Gill, AND-400, on an action item from the May 15 JRC meeting to discuss the timing and need for digitizers if the STARS program were deployed at the rates of 2 and 2.5 systems per month.

At the start of the JRC meeting, John Scardina announced that two programs being presented at the JRC, Power Systems Sustained Support and NIMS Phase 2, had used the "30-Day Investment Analysis Tiger

Team" approach. He stated this approach was successful and could be used as a prototype for accomplishing future investment analyses.

FY-02 F&E Budget: Mr. Street briefed the progress for the development of the FY-02 F&E budget. He reminded JRC members that ARA and ATS were working the \$20M shortfall identified in the FY-02 \$2.545B budget level which was briefed during the May 15 JRC. For the FY-02 \$2.9B budget level, two issues were still being worked. Since work has not been completed on these activities, Mr. Street stated the FY-02 F&E budget would be presented at the May 30 JRC. He also said that the programs being presented today for investment decision are affordable.

Mr. Tim Rosado asked if programs experiencing cost increases have been offset in the CIP five-year plan. Mike Harrison stated this has been accomplished and added that the CIP five year plan reflects the program being presented today. Chris Reese, AFZ-400, stated that they had completed a validation of the major programs in FY-02 as F&E decisions were being made with the OPS baseline being changed accordingly.

No decision was made nor any guidance provided.

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NIMS Phase 2: Mr. Simmons and Mr. Chin briefed the program and requested formal JRC approval of the investment decision and APB for NIMS Phase 2. Additionally, Mr. Simmons requested that Airway Facilities (AAF-1) be assigned the In-Service Decision authority.

Mr. Simmons covered the need for NIMS, noting that NIMS is helping to close the gap in the workforce needed and can make up for about 50% of the unmet staff level requirements.

In response to a chart that depicted the trend in workload, productivity and quality of service, Mr. Mehan noted that it would be beneficial to categorize the outages rather than lump them together. He stated that it would also be useful to determine the critical outages. Mr. Mehan was informed that information on outage data (such as mean-time-to-repair) showing trends and categories could be provided but not down to the component level.

Mr. Simmons briefed the planned approach for NIMS Phase 2 as using an evolutionary development which includes sub-spiral phases.

Mr. Pyster noted that security is a sensitive issue for the NIMS program. As security has many NAS interfaces, there is a need to ensure that all security considerations, including information security, be factored into the program.

Mr. Chin briefed the benefits analysis of both the NIMS Phase 1 and Phase 2 programs noting that benefits presented are for the NIMS program only.

Mr. Zaidman noted that NIMS Phase 2 is a complex program, and that it is facing some difficult issues in policy and labor relations. He suggested a monthly meeting be established with representatives from ASY, AIO, ATS, MITRE, the program office and PASS. The purpose of the meeting is to keep all interested parties aware of the program's progress and to help shape the program as it proceeds along the path to completion. There was general agreement from the JRC members that this monthly review should be established. Alan Moore, AAF-1, recommended that a DRAFT NIMS Program Plan be completed prior to conducting the first of these monthly meetings.

The JRC approved the NIMS Phase 2 investment decision and APB, and assigned the In-Service Decision authority to AAF-1. Mr. Zaidman recommended that a progress review be conducted monthly with representatives from ASY, AIO, ATS, Mitre, the program office and PASS.

NEXCOM: Mr. Shveda briefed the program and requested formal JRC approval for the strategy and changes to the APB for NEXCOM. The basis for the changes to NEXCOM are Congressional and FAA budget actions which caused the program financial and schedule baselines to become unexecutable. In addition, some key technical and financial assumptions utilized to develop the May 1998 baseline did not materialize or were found to be invalid. The scope of the program is the same and there is no change in the APB for the NEXCOM performance requirements.

In comparing the previous strategy with the present, Mr. Shveda noted that the May 1998 program strategy was based on a component replacement approach while the program today is more of an end-to-end system approach. Mr. Shveda stated that Segment 1 is divided into two parts. Segment 1a is focused on procuring, testing, and deploying the NEXCOM multi-mode digital radio (MDR) in the high/super high En Route environment. Segment 1b is focused on increasing user involvement and buy-in; developing the architecture, specification and procurement package for the NEXCOM system; spectrum analysis activities; and developing, procuring, and deploying an integrated digital voice and data system incorporating a remote interface unit (RIU) and ground network interface (GNI) to be used with the previously procured MDR.

Mr. Shveda was asked what is the commitment for the remainder of the program if the JRC signs up for Segment 1 of NEXCOM. He responded that signing up for Segment 1 signs the agency up to do the remainder of the program.

Mr. Shveda briefed the updated Segment 1 costs (Segment 1a and Segment 1b), noting that the FY-00 to FY-05 requests are within the latest revised CIP five year plan. John Hennigan asked about the OPS cost for Segment 1a and Segment 1b. Mr. Shveda responded that the OPS cost has not been broken out as it is being driven by staffing standards. He noted that the F&E funding profile does not include funding for infrastructure improvements (Power System Sustained Support and Modernize and Improve FAA Buildings).

Mr. Shveda briefed the JRC milestones for both Segment 1a and 1b, noting the program plans to come back to the JRC for revalidation of Segment 1b, and approval for Segments 2 and 3 in May 2003. In the ensuing discussion, JRC members voiced concern that returning in May 2003 is too late for a program of this complexity. Mr. Mehan suggested that the program come back in FY-02 and brief the JRC on the program's progress.

The JRC approved the NEXCOM acquisition strategy to divide Segment 1 into two parts, 1a and 1b, and approved a revised APB for Segments 1a and 1b. As a result of the discussion, there was an agreement that the program should come back in FY-02 to provide a progress report to the JRC on development work contained in Segment 1b and not wait until May 2003 to review the need to update the baseline for Segment 1b.

FSRM: Ms. Fay briefed the program and requested formal JRC approval to change the APB cost and schedule baselines. Ms. Fay stated that on February 10, 1999, the JRC conditionally approved the requested investment decision, along with the APB's cost (F&E), schedule, performance and benefits baselines, and directed that the IPT implementing organization should revise the OPS F&E cost to align with a

JRC-directed F&E funding profile baseline and then submit the APB to the JRC for formal approval at a later date. As part of the conditional approval, the JRC also established ANS as the implementing organization for this program during the February 10 meeting.

Mr. Zaidman asked if the program had an F&E baseline. Ms. Fay responded that they had an F&E baseline that aligned with the JRC-directed funding but due to some OPS affordability issues, the APB had not been officially signed off and that is why they were back to the JRC for a program rebaseline.

During the discussion, Mr. Mehan asked if the program was looking at smart cards and biometrics as ways of implementing security measures. Ms. Fay responded that this was not currently in the program. It was noted that magnetic ID card (swipe card) rather than biometrics is the current technology and that a magnetic ID card provides 90% security measures.

It was noted that the program's funding profile for FY-03 was \$3.5M less than what is in the budget. As a result, the CIP profile will be changed to match the program's profile. *(See Addendum)

The JRC approved the FSRM rebaselined APB cost and schedule.

Power Systems Sustained Support: Ms. Burnham briefed the program and requested formal JRC approval of the investment decision and APB for the Power Systems Sustained Support program. She provided a recap of the JRC guidance from the May 15 meeting. At this meeting, the JRC had advised the investment analysis team (IAT) to baseline the program at the ATS alternative (ATS Alternative F&E - \$53.8M/FY-02, \$60M/FY-03, \$70M/FY-04 for a total of \$183.8) for the Power Systems Sustained Support program. Ms. Burnham also reviewed the ATS Alternative cost, schedule, and benefits baselines.

Ms. Burnham presented several management recommendations prepared by the IAT in order to obtain guidance from the JRC. The first covered increasing the funding level to the program by 5% annually in order to reach a steady state level of \$100M by FY-10. This was being requested because, as noted by the IAT, the program had been significantly underfunded over the past five years and that current funding does not allow for any systematic reduction in the average age of the power infrastructure nor for disciplined program planning or execution. Management by emergency is the norm. Ms. Burnham also recommended, and the JRC agreed, that the NIPS Product Team should complete an alternatives analysis to confirm out-year funding levels. This should be accomplished prior to increasing program funding by 5% annually.

Ms. Burnham pointed out that the ATS Alternative did not cover funding to support the power requirements for STARS, NEXCOM, and ATCBI-6. The JRC requested that the NIPS PT and the PTs responsible for STARS, NEXCOM, and ATCBI-6 meet to reach consensus on their power requirements.

Ms. Burnham recommended that the NIPS PT should take the lead in ensuring consistency across the FAA's orders, standards, and engineering guidance pertaining to power systems. In the ensuing discussing on this topic, the JRC recommended that ASD-100 and the NIPS PT meet to discuss this issue.

The JRC approved the Power Systems Sustained Support investment decision and APB covering the ATS alternative.

Airport Cable Loop Systems Sustained Support: Mr. Denton briefed the program and requested formal JRC approval of the investment decision and APB for Airport Cable Loop Systems Sustained Support.

Mr. Denton discussed the FAB waiver, signed by the FAE, which allowed the acceptance of an existing analysis as a substitute for an investment analysis.

During the presentation on the funding baseline, concern was raised regarding adequate coordination of the numbers proposed in the APB. It was noted that the current FY-02 budget has a program request of \$4M and not the \$5.7M (a difference of \$1.7M) being requested by the program. After further discussion, Mr. Hevelone recommended that additional coordination be completed and that the program come back to the JRC at a later date once this has been accomplished.

Norm Fujisaki, ASD-2, suggested the program may be a candidate for cost sharing under a pilot program addressed in the Aviation Investment Reauthorization for the 21st Century (AIR-21).

The JRC decided to postpone an investment decision until additional coordination could be effected and affordability is addressed.

Next Generation Messaging: Mr. Boe briefed the program and requested formal JRC approval of a mission need for Next Generation Messaging. He stated the program is on a short track to replace the current cc:Mail application, since Lotus (cc:Mail vendor) will cease support for this application after October 31, 2001. The program office is looking at replacement options, which includes outsourcing. Additionally, the FAA needs to satisfy new government regulations for security, message archiving, directory services and other functions. Currently, they are looking at a three-phase program and plan to come back to the JRC to justify each phase.

In the ensuing discussion it was noted that DOT is looking at outsourcing and also at using MS Outlook. TASC is looking at iPlanet as an option for replacing their email applications. Mr. Hennigan reminded the JRC that there is legislation that prohibits adding money to the TASC outsourcing contract. Regardless of what application is selected, the JRC noted that interoperability with DOT is a requirement. Chuck Martin, ABA-300, informed the JRC that DOT is developing guidance for cross-cutting programs and advised the team to stay aware of what DOT and TASC are doing in this area.

Mr. Zaidman noted that ARA has a lot of post offices. Mr. Boe responded that as part of their analysis they are looking at reducing the number of post offices, potentially assigning one per facility, which should reduce the overall cost.

Mr. Boe provided a funding estimate (F&E and OPS) for the program. During the discussion, it was noted there is no F&E funding in the current budget for this program and that only \$10M in OPS is budgeted. The OPS funds in the budget are for FY-01 and is \$5M less than is needed for that year.

Though the program was requesting a mission need decision, discussion did focus on the need to perform a credible investment analysis, especially considering the time frame required to replace the current system. Additionally, it was recognized that it is necessary to find out in a short order, just what the program costs will be, especially since there is a funding issue. In response, Mr. Fujisaki committed to developing a full-time, fast-track "Tiger Team" to perform the investment analysis for the program.

The JRC approved the Next Generation Messaging mission need.

ASR-11: Ms. Gill briefed on an action item from the May 15 JRC meeting to discuss the timing and need for digitizers if the STARS program were deployed at the rates of 2 and 2.5 systems per month. Based on

the analysis performed, 22 digitizers would be needed to support the STARS deployment rate of 2.5 per month. This analysis was based on the ASR-11 program receiving \$11M in FY-01.

In the ensuing discussion, it was noted that an end-to-end test of a digitizer with either the ASR-7 or ASR-8 and STARS has not been accomplished. As a result, there is risk associated with the digitizer/ASR-7/8 integration with STARS.

The JRC noted that the House mark is below \$100M for the ASR-11. In the ensuing discussion, options were reviewed on how best to appeal the House mark. It was noted that the Senate mark is to occur in early June. ABA is to get back to Steve Zaidman on what should be done.

Decisions

NIMS Phase II: The JRC approved the NIMS Phase 2 investment decision and APB, and assigned the In-Service Decision authority to AAF-1.

NEXCOM: The JRC approved the NEXCOM acquisition strategy to divide Segment 1 into two parts, 1a and 1b, and approved a revised APB for Segments 1a and 1b. The JRC also directed the program to return to the JRC in FY-02 to provide a progress report on development work contained in Segment 1b.

FSRM: The JRC approved the FSRM rebaselined APB cost and schedule.

Power Systems Sustained Support: The JRC approved the Power Systems Sustained Support investment decision and APB covering the ATS alternative.

Airport Cable Loop Systems Sustained Support: The JRC decided to postpone an investment decision until additional coordination could be effected and affordability is addressed.

Next Generation Messaging: The JRC approved the Next Generation Messaging mission need.

Action Items Assigned by Acquisition Executive	Assign to	Due Date
1. Establish a monthly progress review with representatives from ASY, AIO, ATS, Mitre, and PASS for NIMS Phase 2.	AOP-1	7/30/00
2. Report back to the JRC in FY-02 on development work contained in NEXCOM Segment 1b. Provide status report at next acquisition review.	AND-300	11/30/00
3. Meet with STARS, NEXCOM, and ATCBI-6 product teams to reach consensus on power requirements.	ANS-600	9/30/00
4. Complete an alternatives analysis to confirm out-year funding levels for power systems by September 30, 2001. Provide status report at next acquisition review.	ANS-600	4/30/01
5. Meet with ASD-100 to discuss who should take the lead in insuring consistency across the FAA's engineering guidance pertaining to power systems.	ANS-600	9/30/00
6. Complete coordination on the funds needed and ensure affordability is addressed for Airport Cable Loop prior to coming back to the JRC.	ANS-600	7/30/00
7. Report back to ARA-1 on how best to appeal the House Mark on ASR-11.	ABA-1	7/30/00

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Steven Zaidman

Associate Administrator for Research and Acquisitions, ARA-1

Rebecca T. King, Acting Manager

NAS Configuration Management and Evaluation Staff, ACM-1

(0/29/00) Date

*ADDENDUM: During the coordination of the minutes, the FSRM program office discovered an error in the APB funding profile that was presented at the JRC. The funding profile for FY-05 was \$1.9M less, rather than \$3.5M less, than what was reflected in the five-year plan. This information has been coordinated with ASD-100 who will make the appropriate changes to the CIP five-year plan.